

**Cornell University**  
**Albert R. Mann Library**  
**Ithaca, NY 14853-4301**

Title: "Preserving the Core Historical Literature of Home Economics"

# Preserving the Core Historical Literature of Home Economics

“Home Economists in early 20<sup>th</sup> century America had a major role in the Progressive Era, the development of the welfare state, the triumph of modern hygiene and scientific medicine, the application of scientific research in a number of industries, and the popularization of important research on child development, family health, and family economics. What other group of American women did so much, all over the country, and got so little credit? ... We must do everything we can to preserve and organize records and materials from this important female ghetto.”

Joan Jacobs Brumberg, Professor, Cornell University College of Human Ecology and author of *The Body Project: an Intimate History of American Girls*.

## Abstract

Mann Library at Cornell University proposes a two-year project to digitize the core historical literature of home economics (CHLHE). This literature will be identified through bibliographic analysis by librarians at Cornell and other land-grant libraries; then ranked by scholars in the field to determine the importance of individual titles. This method has proven successful in the large project conducted at Cornell to identify and preserve the Core Historical Literature of Agriculture (Olsen, 1991-1996). The work to identify and rank the literature of home economics is underway and will be funded separately.

In the course of this project Cornell will:

- Begin the work of preserving an irreplaceable record of American social and family life.
- Create a digital library of 1500 volumes of the most highly ranked material from each of the sub-disciplines that make up the field of home economics (Attachment A).
- Explore the integration of the CHLHE digital library with our online catalog. Our goal is to avoid the typical duplication of bibliographic records (metadata) in both catalog and digital library system.
- Explore the interoperability of the CHLHE digital library with existing digital repositories such as the Making of American (MOA)
- Implement from the beginning of a project the guidelines and recommendations of the current Cornell IMLS-funded project, "Preserving Cornell's Digital Image Collections: Implementing an Archiving Strategy." Define a set of model workflows for economically and consistently capturing descriptive, structural, and administrative metadata for access and preservation of digital image materials.

Modeled on the successful collaboration that has occurred within the agricultural segment, this project lays the groundwork for an ongoing preservation effort in the land-grant community of home economics schools and libraries. Consumer and Family Studies librarians throughout the country have agreed to join our efforts to build the digital library for the history of home economics, once it is underway. The resulting digital archive will provide a new, widely accessible resource for scholars in the fields of consumer and family studies, women's history, and American social history.

# NARRATIVE

## National Impact

This project will create a digital library of the Core Historical Literature of Home Economics (CHLHE). The discipline of home economics is filled with continuities and contradictions. It is both feminist and traditional at once; scientific and domestic together (Powers, 1992). It is the discipline through which significant numbers of women entered academia and scientific research for the first time. The material provides unequalled access to the story of women's lives in the last century and a half: how women worked, what they hoped and strove for, and how they saw themselves as members of families and communities. It provides this information for women of many classes and of diverse circumstances - women of the middle class, rural women and farmers, immigrants living in large cities, and African-American women whose families were emerging from slavery. Although home economists are often thought of in connection with their championship of traditional womanhood, their efforts to modernize women's roles have begun to receive scholarly attention (Grant, 1997). Joan Brumberg, professor of Human Development in the Cornell University College of Human Ecology states, "any historical material that helps us to understand the broad rubric of home economics is really a contribution to the history of American women. The reason is that 'home economics' encompassed so much, in terms of academic disciplines, occupations, and kinds of women. We really need to develop resources nationally for studying it systematically and in that process, re-invigorate the name, so that it is not regarded as simply 'glorified housekeeping.'" By creating a digital library for this material, scholars around the country working in American history, women's studies, and consumer and family studies will have access to an archive of the scholarship in this important subject area.

During the time period 1850-1950, millions of books and journals were printed on acidic paper. The material in the stacks of many libraries, including Mann Library, is deteriorating at an alarming rate. Not all of this material can be preserved for posterity, but it is important that at least the core literature of disciplines be preserved for the use of future scholars. Mann Library has coordinated the National Preservation Program for Agricultural Literature (Gwinn, 1993), making the pre-1950 literature of agriculture accessible to scholars, researchers, and scientists and saving it from loss. Our project builds on this work, using similar methodologies for the disciplines of home economics. Mann is uniquely qualified to lead in the preservation of the literature of home economics; our College of Home Economics was among the first such institutions, and our holdings reflect our long history of collecting in depth to support the College. Cornell was the host, in 1991, of a conference, "Rethinking Women and Home Economics in the Twentieth Century," and the College supports a fellowship in the history of home economics. One recipient of the fellowship, Kathleen R. Babbitt, Department of History Binghamton University, wrote to us after her fellowship, and said, "Each time I enter Mann Library I breathe a little prayer of thanks to the God of Historical Sources for all the good research done by home economists and rural sociologists at Cornell!"

Cornell has been a pioneer in the conversion of traditional library material to digital form. Like other large repositories, we are now turning our attention to improving and refining access to the materials we have preserved digitally, to integrating them with our traditional collections, and to providing excellent, long-term public access to our archives. CUL researchers are currently developing metadata elements and categories needed to ensure long-term preservation of digital image files as part of the IMLS-funded grant "Preserving Cornell's Digital Image Collections: Implementing an Archival Strategy." Our project will be the first to use these elements in providing access to new digital files. By building on the work of this groundbreaking project, we will define a set of model workflows for economically and consistently capturing essential descriptive, structural and administrative metadata for access as well as preservation of full-text digital image materials.

Finally, we will explore new methods for the fundamental integration of separate repositories of metadata related to a single body of materials. By integrating records in our online catalog more fully with digital library metadata we can save time and effort. The database we create and deliver using this system will serve as the model upon which we and other libraries build richer and more accessible archives of research materials.

### **Adaptability**

If we are to do substantive research in social history it is essential to preserve the printed material of everyday life, not just the output of scholarly presses. Saving the historical home economics literature represents an enormous step forward in this endeavor. We have met three times with librarians in the ACRL Consumer and Family Studies Discussion Group, and they have endorsed this project and look forward to it as the first in a series of projects to which their institutions will contribute.

In addition, as more libraries and museums build increasingly large and complex databases of digital material, it is essential that we also provide easy and comprehensive access to the contents of the files. This is particularly important in the case of text which is digitally preserved as images. This project will investigate linking repositories of metadata to permit access to the information from several points. For example, the organization of the metadata in this project will permit us to serve the same digital files based on queries from our library catalog or from the CHLHE website, without expensive and confusing duplication of the files. This is the basis of any coherent digital library; successful techniques are needed immediately and will be of substantial benefit to any institution with large digital collections.

### **Design**

#### ***Selection***

A pilot project to establish the best methods of selecting items for preservation reformatting is currently underway. Many of the selection and ranking techniques which proved successful in the Core Historical Literature of Agriculture (CHLA) project (see Olsen, 1991-1996) will be employed in this project. Lists of publications will be reviewed and ranked by panels of experts, to determine which will be most valuable to future scholarship. From this ranked list of titles, 1,500 volumes (450,000 pages) will be reformatted as digital images. All items selected in this first round of 1,500 volumes will date from before 1923 and be in the public domain. Funding for the selection process comes from other sources, including Hatch funding (Federal appropriations from the USDA). The full scope of the field of historical home economics is found in Attachment A.

#### ***Conversion to a Digital Format***

The approaches for conversion taken by this project will build on the increasingly popular methods articulated by Kenney and others, and used in the Making of America projects at the University of Michigan and Cornell University (Kenney and Chapman, 1996) and the Core Historical Literature of Agriculture project at Cornell (Olsen, 1991-1996). The procedures used by this project will affirm guidelines and best practices that are well established in the preservation community.

#### ***Prescanning Preparation***

Most volumes will undergo a simple conversion process. Each volume will be collated page-by-page to ensure that the volume is complete. Pages will be repaired, and replacements for damaged or missing pages provided, as necessary. Pre-conversion treatment will be minimized. Project staff, under the guidance of the Preservation Librarian, will disbind each of the volumes. Basic bibliographic and descriptive information (total number of pages expected to be scanned; bibliographic data: author, title, publisher, place of publication, series notes, and subject headings, and any anomalies, such as missing pages) will be noted and sent to the service vendor with the volumes to be converted.

### *Scanning*

Scanning will normally begin with the title page, unless specific instructions indicate that endpapers or other materials should be scanned. All tables of contents, prefaces, introductions, indexes, bibliographies, and advertisements will be scanned. Project staff will place flags in each volume to indicate where to begin scanning, where to end scanning, and to identify illustrations, maps, and foldouts.

Pages will be scanned as true or interpolated 600 dpi bitonal (one-bit) images. All images will be TIFF 6.0 and compressed using ITU Group 4 (formally CCITT), Intel byte order. The service vendor will scan two technical targets, the RIT Alphanumeric Test Object and the AIIM Scanner Test Chart #2 (see Attachment B for scanner calibration requirements), and a production note at the beginning of each volume. Because of the age of the material, the vendor will be required to manually place the sheets on the platen of the flatbed scanner; the use of an automatic document handler will not be allowed. The product will be returned to Cornell on CD-ROMs.

### *Quality Control and Document Structuring*

Preservation project staff will undertake a quality control process for the images. As an ongoing activity, project staff will inspect 100% of the images to evaluate quality. Images will be inspected to ensure completeness, legibility, and placement of the images. (For standards to be employed see Attachment B.) During the quality control process, pagination structure will be noted and special features; such as front matter, title page, table of contents, etc. will be highlighted using a program developed at Cornell for an ongoing project to digitize and preserve Icelandic literature.

### *Quality Control of Date Organization*

A sampling for inspection and evaluation will be in accordance with the ASQC Z1.9-1993, *Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming* (General Inspection Level II) and ASQC S2-1995, *Introduction to Attribute Sampling*.

### *Post-scanning Processing*

Page image files will be processed to generate OCR and XML that enable searching and navigation. For serial material, the markup will tag for journal title, volume, issue, article title, etc. For monographs, the markup will tag structural elements, such as table of contents, chapter, index, and illustrations, as well as tag bibliographic information, such as title, date of publication, author, etc. Full-text searching will be provided via the OCR'd text. We intend to exploit structural markup wherever possible to enhance searching, e.g. find "Early Child Development" in Chapter Title. Content will be displayed to the user through the page images, which will ensure the user sees the most accurate representation of the original print material.

### *Delivery System*

The CHLHE system will use ENCompass Information System from Endeavor Information Systems. ENCompass is a state-of-the-art digital object repository which has the potential to interoperate with other repository systems, such as the Dienst-based NCSTRL (<http://www.ncstrl.org>) system or the most recently announced Open Archives initiative (<http://www.openarchives.org>). We will store the digitized page images in the ENCompass system along with the XML-marked up, OCR'd text. The ENCompass system provides a number of features:

\* **Storage Management:** ENCompass is built upon the Oracle database management system. This approach is a significant advance over other repository schemes, which simply store TIFF images as individual files in the host operating system. A database management system (DBMS) provides several levels of security to guard against file corruption, accidental deletion, and obsolescence. A DBMS provides other services, such as automatic backups and synchronization of data across multiple repositories, which vastly simplifies the overall management and safeguarding of the information.

\* **Interoperability:** ENCompass is designed to accommodate new modules, which extend interoperability with other repository systems. The Cornell University Library currently employs both Dienst and the University of Michigan's MOA software for the delivery of other digital image collections. With the CHLHE initiative, we intend to explore interoperability with both of those systems. We will first work to develop interoperability with Dienst. Once that connectivity has been established, we will explore the feasibility and utility of similar interoperability with Michigan's MOA software. The ability to extend ENCompass ensures the longevity of the system and a migration path to new systems, if the need should ever arise.

\* **Extensibility:** ENCompass is designed to manage a variety of digital object types. In addition to TIFF images, ENCompass can, for example, easily integrate audio and video sequences. Building CHLHE around ENCompass provides us the opportunity to incorporate the corpus into other campus initiatives in support of teaching, research, and extension.

\* **OPAC Interoperability:** A long-standing problem of all current digital image systems is integration with existing OPACs. Users are typically faced with a multi-step procedure: search the OPAC for a title or subject only to discover that a second search is necessary within the digital image management system. We hope to exploit the ability of ENCompass to tightly integrate with a modern OPAC to provide "one-stop" searching. Our goal is to avoid the typical duplication of bibliographic material in both the OPAC and digital image system. Elimination of this redundant metadata will greatly simplify the workflow of catalogers and will result in a library information system that is, overall, much easier to maintain.

### ***Cataloging and Metadata:***

This project will base its descriptive, administrative and structural metadata schema on the results of the current IMLS-funded grant, "Preserving Cornell's Digital Image Collections: Implementing an Archival Strategy." Mann Library will enter records for all reformatted materials into the RLIN and OCLC databases. All monographs and pamphlet materials will receive either full-level or core-level cataloging. Serials will receive full-level cataloging.

Structural metadata will be captured for all materials. The structural metadata schema will define an optimal set of information for access enhancements, such as improved access to images contained within the materials. By monitoring the time and costs required to capture various types of descriptive and structural metadata, we will develop recommendations that other institutions can use to capture this level of information. Administrative metadata captured will provide detailed documentation of the technical origins and provenance or lineage of the image files to be used in future migration plans.

This project will call upon the metadata expertise of both Technical Services and Information Technology staff. In addition, they will work closely with Preservation staff to develop a useful model of efficient workflow which other institutions can follow.

### ***Printing for Preservation***

A high-resolution printer will print each volume on high quality acid-free paper. These print outs will be bound and placed in the library stacks for use by patrons and for interlibrary loan. Reprints of this nature are long-lived and ensure that the content of the original volume would be preserved if the digital copy were irretrievably lost.

### ***Management Plan and Personnel***

The principle investigator for the project will be Mary Ochs, Head of Collection Development and Preservation at Mann Library, who will devote 5% of her time over the 2-year course of the project (resumes of key project staff

members are attached). She will oversee project development and implementation and coordinate the efforts of the multiple parties involved. She will supervise the selection of material to be preserved and serve as liaison to national consumer and family studies groups interested in contributing to the project long-term. She will also coordinate the evaluation of the project and dissemination of the results. Prior to serving as Head of Collection Development and Preservation, Ochs was Deputy Director of Mann Library's The Essential Electronic Agricultural Library (TEEAL) project, a compact disk library of over 800,000 pages now in distribution to developing countries.

Joy Paulson, Preservation Librarian at Mann Library, will serve as project manager, devoting 25% of her time to the day-to-day management of the project. With Cornell Purchasing, she will develop, circulate, award and manage a contract with a vendor for digital imaging. She will evaluate technical issues with service providers during conversion, and assess contractor and staff performance in maintaining preservation standards. She will hire and supervise the preservation assistant hired for the project. Paulson possesses extensive experience managing preservation microfilming and digital imaging projects, including the University of Michigan's Making of America I and IV projects.

Thomas Turner, Metadata Librarian, will devote 5% of his time to the project. He will work with Information Technology staff to assess the metadata needs for linking multiple repositories of digital images and metadata. He will supervise the .5 FTE Copy Cataloger, who will catalog project materials. In addition to traditional cataloging activities, Turner works extensively with metadata for various types of digital resources. He is currently a member of the project team for the IMLS-funded grant, "Preserving Cornell's Digital Image Collections: Implementing an Archival Strategy."

Tim Lynch, Head of Mann Library's Information Technology Section, will devote 5% of his time to the project. He will direct the technical aspects of the project, including the experimentation with the ENCompass software. Lynch has held a leadership role in many of Cornell's innovative digital library projects. In addition to his role at Mann, he is the Technology Strategies Officer for the Cornell Library system. Lynch will hire and supervise the .75 FTE programmer, who will perform the programming required to create and maintain an ENCompass digital library. The programmer will program the interfaces to allow for interoperability between CHLHE and the Dienst and Making of America systems and interoperability with the OPAC. The programmer will supervise the post-scanning processing of the digital images and will have day-to-day responsibility for the operation of the CHLHE delivery system.

Michael Cook, Social Science Bibliographer at Mann Library, has extensive experience with Web design and will be called upon to assist in the development of the CHLHE interface. Cook will devote 10% of his time to the project for the first year.

A full-time preservation assistant will be hired to prepare materials for scanning, perform quality control and document structuring on the digital images. Joy Paulson will supervise this position.

Student assistants will be hired for cataloging tasks. They will be overseen by Tom Turner.

All members of the project team will meet regularly to coordinate project activities.

## **Budget**

The budget is presented in detail on the accompanying sheets.

## **Evaluation**

This project will preserve approximately 1,500 of the most important volumes in the history of home economics, and create a digital archive of them that will be accessible through the World Wide Web. The success of this effort may be measured numerically, by tracing the number of volumes digitized, OCR'd and mounted for public access, and the



number of preservation replacement copies printed. We anticipate adding volumes to the digital library beyond the 1,500 funded in this project.

To evaluate the utility of the digital archive, the library will rely on user statistics for the web site and user surveys. Mann Library has conducted a number of user surveys that have proven helpful in designing and enhancing other online resources and services. Analyzing requests for assistance to the library public services desks and inquiries via e-mail to Reference will also help gauge the effectiveness of the design and the utility of the help files.

The library will also work with College of Human Ecology classes that perform historical research. These students, the College Fellowship recipients, and other family and consumer studies librarians will serve as focus groups for an outcome-based evaluation of the system.

The success of the experimental parts of this project, i.e. the creation of workflow patterns for digitization, and the exploration of ways to integrate separate repositories of metadata will be measured both by whether the processes that are developed are adopted as standard procedures, and by what can be learned that helps develop better processes for handling metadata and workflow.

### **Dissemination**

This public archive of the Core Historical Literature of Home Economics (CHLHE) will be freely available to anyone with access to the World Wide Web. An easy-to-use interface will permit searching by standard library access points, and will also permit keyword searching within the full-text. The digital files we create will also permit us to print preservation copies for our own use and (at cost) for other institutions that wish to hold them in paper. Records for the digital files will be entered into the national bibliographic utilities, RLIN and OCLC. All metadata will be stored in Z39.50-compliant databases to enable sharing of information among institutions.

We are already working with the ACRL Consumer and Family Studies Discussion Group to be sure librarians working in the field are aware of our current identification and preservation efforts for home economics. When the archive is available, we will announce it through listservs and publications to this group, as well as others working in fields related to American social history. These scholars will most certainly welcome a digital archive of literature reflecting the social concerns and domestic life of women in the late 19<sup>th</sup> century and early 20th century.

Before the archive is publicly available, we will prepare and disseminate the bibliography of possible titles for digitization based on our identification and ranking of the historical literature of Home Economics. The complete bibliography will be available online on the project website.

Along with the archive, we expect work on this project to result in a set of procedures and reliable cost estimates for production level digitization projects. It is our intent to document workflow, staffing, metadata creation, and quality control procedures and share them with others beginning digitization projects. We will work with the Reformatting Committee of the Preservation and Reformatting Section of the Association for Library Collections & Technical Services (American Library Association) to make these results widely available, as well as preparing the results for publication; a report will also appear on the project website.

Finally, the models we create for the integration of multiple metadata repositories will be fully reported, first on the project website, and then through presentations at conferences and publications. We anticipate presenting information about the archive and its creation at a variety of meetings, including the conference of the USAIN (United States Agricultural Information Network) and the Consumer and Family Studies Discussion Group of the ACRL, and other

professional meetings of historians and information technologists. Our achievements in organizing and using metadata and in the creation of a digital archive will be of interest, and will be reported, to the larger library community.

## **Contributions**

See Budget and Management sections for details.

## **Sustainability**

We will build the CHLHE digital archive according to the guidelines developed under Cornell's current IMLS project, "Preserving Cornell's Digital Image Collections: Implementing an Archiving Strategy." Cornell is committed to developing and maintaining high quality, reliable digital image collections, and CHLHE will be part of this larger effort at Cornell.

The project is also part of a nationwide interest in coordinating the preservation of materials in the disciplines that make up Home Economics. Consumer and Family Studies librarians from around the country are looking to this project as the beginning of a multi-institution program to preserve and provide access to this important material. We expect to add material to the system from other libraries around the country once the CHLHE digital library is established. Mann Library has played a leadership role in developing a collaborative approach to preservation. Working with the National Agricultural Library and the land-grant community, Mann has coordinated an effort to preserve the literature of the agricultural sciences in a series of NEH-sponsored initiatives. This project, which now involves sixteen land-grant institutions, follows a plan outlined in the National Preservation Plan for Agricultural Literature (Gwinn, 1993). For the last five years, Mann Library staff have served as project leaders, a role that has included initiating and writing grant proposals, developing selection strategies, training, and project management. These same skills will be applied to this new initiative.

## **Technical Knowledge**

Mann Library is eminently qualified to undertake this project. An information technology staff of six full-time programmer/analysts and computer specialists supports digital library projects at Mann Library. The Mann staff is responsible for creating and maintaining a wide array of electronic resources for the Cornell community. Some of these systems are available to researchers throughout the world:

- Cornell Library Gateway: (<http://www.library.cornell.edu>)
- USDA Economics and Statistics Systems: (<http://usda.mannlib.cornell.edu/usda/usda.html>)
- CUGIR Cornell University Geospatial Information Repository: (<http://cugir.mannlib.cornell.edu/>)

Mann Library has been a leader in digital imaging projects. Mann's early experience in the Chemical Online Retrieval Experiment (CORE) Project included investigating the storage, telecommunications, and interface design issues in delivering the text of journal literature over the campus network. The project resulted in the conversion of 500,000 pages of microfilm text from 22 journals of the American Chemical Society to digital image. An additional 450,000 images were converted to digital images to build the Core Historical Literature of Agriculture (CHLA). In 1998 Mann also received funding from the Rockefeller Foundation to create TEEAL (The Essential Electronic Agricultural Library), a CD-ROM library of over 800,000 digitized pages from the most important current agricultural journals. The system is being distributed at cost to developing countries as a self-contained library.

CUL's Department of Preservation and Conservation has earned an international reputation for conducting research on digital image quality and established *de facto* standards governing the capture of text-based materials that are widely cited by the research and cultural community. Additional investigations into preservation-related concerns included a project with Mann Library that evaluated the use of high resolution digital images to produce Computer Output Microfilm (COM) that meets ANSI/AIIM standards for image quality and permanence (Kenney, 1998). Another

study, on the use of the Kodak Photo CD technology to capture special collections material has resulted in recommended guidelines for photography, digitization, image access, and quality review (Kenney and Chapman, 1996).

In addition to research and demonstration projects, the Preservation Department has been active in digital production projects, such as the Making of America Project, a joint collaborative project with the University of Michigan, which resulted in the conversion of 1.5 million pages of key 19<sup>th</sup>-century U.S. journals and monographs and the development of web-accessible digital library sites at both schools.

The Preservation Department has also initiated a number of education and publication efforts: since 1995, the Department has offered 10 comprehensive digital imaging workshops that have attracted participants from around the world. In 1996, the Department published Digital Imaging for Libraries and Archives, which won the Society of American Archivists' LeLand Prize as the best monograph of the year. In 1997, the Research Libraries Group contracted with the Department to produce a bimonthly electronic newsletter, *RLF DigiNews*, which serves as a forum for information on both preservation and digitization.

As explained in full in the Design Section of the narrative, best practices and standards will be employed throughout the project.

### **Information Access**

Access to the CHLHE archive, created as a result of this project, will be provided through the Cornell University Library electronic gateway (<http://www.library.cornell.edu>) and through a project website. We will continue to add material to the archive on an ongoing basis and provide public access to the material through our web site. In addition to the publicity to specific user groups discussed in the section on Dissemination, we will also publicize the archive through search engines and Internet directories, such as Yahoo and Altavista.

The Cornell University Library is actively building a world-class digital library, offering access to diverse resources of tremendous depth. Mann Library has created an electronic library, the Core Historical Literature of Agriculture (<http://chla.mannlib.cornell.edu/>), containing a representative collection of 600 agricultural texts published during the period 1850-1950. The Mathematics Library's digital books project (<http://www.math.cornell.edu/~library/reformat.html>) has made 571 early mathematics texts available through the Web. The Making of America Project (<http://moa.cit.cornell.edu/MOA/MOA-JOURNALS2.html>) is a groundbreaking effort to provide digital access to primary sources in American social history. Cornell has made a commitment to maintain and upgrade these sites as the technology evolves. In fact, all three of these collections are currently undergoing an extensive hardware and software upgrade. The collection of the Core Historical Literature of Home Economics will be part of this exciting and steadily growing repository.

## Project Schedule and Benchmarks

Project start up: October – December 2000

Hire staff

Develop RFP, bid process, contract with service vendor

Selection of materials for conversion continues (funded separately)

Conversion: January 2001 – June 2002

Identify and prepare material for scanning

Conversion to digital image

Inspection and document structuring

Load on servers/OCR

Catalog digital copies

Project wrap up: July – August 2002

	12/00	3/01	6/01	9/01	12/01	3/02	6/02
Selected (vols.)	300	600	900	1200	1500		
Prepared for scanning (vols.)		300	600	900	1200	1500	
Scanned (vols.)		200	500	800	1100	1400	1500
Inspected and Structured (vols.)		100	400	700	1000	1300	1500
Cataloged (vols.)			300	600	900	1200	1500
OCR'd (vols.)			300	600	900	1200	1500

# Project Budget Form

## SECTION 1: DETAILED BUDGET

Year 1 - Budget Period from 10 / 01 / 00 to 9 / 30 / 01

Name of Applicant Organization Albert R. Mann Library, Cornell University 8/16/01

IMPORTANT! READ INSTRUCTIONS ON PAGES 2.3-2.4 BEFORE PROCEEDING.

### SALARIES AND WAGES (PERMANENT STAFF)

NAME/TITLE	IMLS	APPLICANT	PARTNER(S)	TOTAL
Mary Ochs, Proj Dir	_____			
Tim Lynch, Head, ITS	_____			
Joy Paulson, Proj Man.	_____			
Tom Turner, Metadata Lib.	_____			
Michael Cook, Bib	_____			
	<b>\$</b> _____			

### SALARIES AND WAGES (TEMPORARY STAFF HIRE

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
Copy Cataloger						
Presv. Assist.						
Programmer						
Student Asst.						

### FRINGE BENEFITS

RATE	SALARY BASE	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
_____					
_____					
_____					

### CONSULTANT FEES

NAME/TYPE OF CONSULTANT	RATE OF COMPENSATION (DAILY OR HOURLY)	No. of Days (or HOURS) ON PROJECT	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
_____			0	0		0
_____						
_____						
_____						
<b>TOTAL CONSULTANT FEES \$</b>			0	0		0

### TRAVEL

FROM/TO	NUMBER OF: PERSONS DAYS	SUBSISTENCE COSTS	TRANSPORTATION COSTS	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
_____ ( ) ( )				0	\$2,000		\$2,000
_____ ( ) ( )							
_____ ( ) ( )							
_____ ( ) ( )							
<b>TOTAL TRAVEL COSTS \$</b>				0	2,000		\$2,000

# Project Budget Form

## SECTION 1: DETAILED BUDGET CONTINUED

Year 1

### MATERIALS, SUPPLIES AND EQUIPMENT

ITEM	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
		0	0		0
TOTAL COST OF MATERIAL, SUPPLIES, & EQUIPMENT \$		0	0		0

### SERVICES

ITEM	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
Conversion from paper to digital image	450,000 images @ \$.25/ image	112,500			112,500
RLIN Searching			2,500		2,500
TOTAL SERVICES COSTS \$		112,500	2,500		115,000

### OTHER

ITEM	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
Computer workstation		2,315			2,315
Workgroup Server			61,142		61,142
Autoloader			7,720		7,720
TOTAL OTHER COSTS \$		2,315	68,862		71,177

TOTAL DIRECT PROJECT COSTS \$	191,196	104,672		295,868
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### INDIRECT COSTS

Select either item A or B and complete C. (See section on Indirect Costs, pages 2.3-2.4.)

Applicant organization is using:

- ☐ A. an indirect cost rate which does not exceed 20% of modified total direct costs
- ☐ B. an indirect cost rate negotiated with a Federal agency (*copy attached*)

\_\_\_\_\_  
Name of Federal Agency

\_\_\_\_\_  
Expiration Date of Agreement

C.	Rate base(s)		Amount(s)
	%	of	\$ _____
	%	of	\$ _____
	%	of	\$ _____

TOTAL INDIRECT COSTS \$	_____
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# Project Budget Form

## SECTION 1: DETAILED BUDGET

Year 2 (if applicable) - Budget Period from 10 / 01 / 01 to 9 / 30 / 02

Name of Applicant Organization Albert R. Mann Library, Cornell University 8/16/00

IMPORTANT! READ INSTRUCTIONS ON PAGES 2.3-2.4 BEFORE PROCEEDING.

### SALARIES AND WAGES (PERMANENT STAFF)

NAME/TITLE	No.	METHOD OF COST	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
Mary Ochs, Proj Dir						
Tim Lynch, Head, ITS						
Joy Paulson, Proj Man						
Tom Turner, Metadata L						

### SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
Copy Cataloger						
Presv. Assist.						
Programmer						
Student Assts.						

### FRINGE BENEFITS

RATE	SALARY BASE	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL

### CONSULTANT FEES

NAME/TYPE OF CONSULTANT	RATE OF COMPENSATION (DAILY OR HOURLY)	NO. OF DAYS (OR HOURS) ON PROJECT	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
			0	0		0
TOTAL CONSULTANT FEES \$			0	0		0

### TRAVEL

FROM/TO	NUMBER OF: PERSONS DAYS	SUBSISTENCE COSTS	TRANSPORTATION COSTS	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
	( ) ( )			6,000	\$2,000		8,000
	( ) ( )						
	( ) ( )						
	( ) ( )						
TOTAL TRAVEL COSTS \$				6,000	2,000		8,000

# Project Budget Form

## SECTION 1: DETAILED BUDGET CONTINUED

Year 2

### MATERIALS, SUPPLIES AND EQUIPMENT

ITEM	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
		0	0		0
TOTAL COST OF MATERIAL, SUPPLIES, & EQUIPMENT \$		0	0		0

### SERVICES

ITEM	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
RLIN Searching		0	\$2,500		\$2,500
TOTAL SERVICES COSTS \$		0	2,500		\$2,500

### OTHER

ITEM	METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S) (IF APPLICABLE)	TOTAL
Printing & Binding	1,500 vols @ \$12.94/vol.	0	\$19,410		\$19,410
TOTAL OTHER COSTS \$		0	19,410		19,410

<b>TOTAL DIRECT PROJECT COSTS \$</b>	<b>86,115</b>	<b>51,950</b>	<b>138,065</b>
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### INDIRECT COSTS

Select either item A or B and complete C. (See section on Indirect Costs, pages 2.3-2.4.)

Applicant organization is using:

- ☐ A. an indirect cost rate which does not exceed 20% of modified total direct costs
- ☐ B. an indirect cost rate negotiated with a Federal agency (*copy attached*)

\_\_\_\_\_  
Name of Federal Agency

\_\_\_\_\_  
Expiration Date of Agreement

C. Rate base(s) Amount(s)

_____ %	of \$	_____
_____ %	of \$	_____
_____ %	of \$	_____

<b>TOTAL INDIRECT COSTS \$</b>	_____
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# Project Budget Form

## SECTION 2: SUMMARY BUDGET

Name of Applicant Organization Albert R. Mann Library, Cornell University

8/16/02

IMPORTANT! READ INSTRUCTIONS ON PAGES 2.3-2.4 BEFORE PROCEEDING.

### DIRECT COSTS

	IMLS	Applicant	Partner(s) (if applicable)	Total
SALARIES & WAGES		—	—	
FRINGE BENEFITS		—	—	
CONSULTANT FEES	<u>0</u>	<u>0</u>	—	<u>0</u>
TRAVEL	<u>6,000</u>	<u>4,000</u>	—	<u>10,000</u>
MATERIALS, SUPPLIES & EQUIPMENT	<u>0</u>	<u>0</u>	—	<u>0</u>
SERVICES	<u>112,500</u>	<u>5,000</u>	—	<u>117,500</u>
OTHER	<u>2,315</u>	<u>88,272</u>	—	<u>90,587</u>
AMOUNT	<u>\$277,311</u>	<u>\$156,622</u>	<u>\$</u>	<u>\$433,933</u>
INDIRECT COSTS*	<u>\$</u>	<u>\$140,526</u>	<u>\$</u>	<u>\$140,526</u>

\*If you do not have a current Federally negotiated rate, your indirect costs must appear in the Applicant or Partner columns only.

TOTAL PROJECT COSTS \$574,459

AMOUNT OF CASH-MATCH \$297,148

AMOUNT OF IN-KIND CONTRIBUTIONS-MATCH \$0

TOTAL AMOUNT OF MATCH (CASH & IN-KIND CONTRIBUTIONS) \$297,148

AMOUNT REQUESTED FROM IMLS \$277,311

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS 48.3 %  
(MAY NOT EXCEED 50% IF REQUEST EXCEEDS \$250,000 - RESEARCH PROJECTS EXCEPTED, SEE PAGE 1.16)

Have you received or requested funds for any of these project activities from another Federal agency?  
(Please check one) ☐ Yes ☐ No

If yes, name of agency \_\_\_\_\_

Date of application \_\_\_\_\_ or award \_\_\_\_\_ Amount requested or received \$ \_\_\_\_\_

**Budget Narrative:**

*Salaries and Wages.* Cornell seeks support for 4 positions (2.5 FTE) for this project: a full-time preservation assistant to do all prescanning preparation, document structuring, and inspection of the images; a half-time copy cataloger to perform all the cataloging functions for the project; a three quarters time programmer in ITS to perform all post-scanning processing and programming; and a student assistant for 10 hours per week. All other personnel are cost-shared.

*Consultant Fee.* There are no consultant fees for this project.

*Travel.* We have budgeted \$4,000 for travel costs as suggested in the guidelines. Travel costs will be cost-shared.

*Materials, Supplies, and Equipment.* One computer workstation with a 19" high-resolution monitor will be purchased for the preservation assistant to use, and we are requesting that this be funded by IMILS. The ITS office will purchase a Sun Microsystems Enterprise 450 Workgroup Server and a Sun Microsystems DLT7000-Based 280 GM Autoloader for use with the project. This equipment purchase is part of our cost-share. Mann has elected to print out and bind copies of each of the volumes it scans for preservation purposes, and this expense is part of our cost-share.

*Services.* RUN searching charges will be used as cost-share for the project. Mann will contract with a scanning vendor for the conversion from paper to digital image. Funding of \$12,500 is requested for the conversion of 450,000 pages of material. Costs are based on recent bids Cornell has received for other digital projects.

*Indirect costs.* Cornell is waiving all indirect costs and using it as part of our cost-share for this grant.

(Costs below do not include indirect costs.)

Prescanning Preparation:	\$.066 per image
Quality Control:	\$.03 per image
Document Structuring:	\$.034 per image
Scanning	\$.25 per image
Cataloging:	\$.093 per image (\$28.02 per volume)
Post-scanning Processing:	\$.292 per image
Printing and Binding:	\$.043 per image (\$12.94 per volume)
Management:	\$.132 per image
TOTAL:	\$.94 per image

## **Organizational Profile: Cornell University and Mann Library**

Cornell University, comprised of thirteen colleges and schools, is both a privately-endowed, Ivy-League university and the land-grant institution of New York State. It serves over 13,000 undergraduate and 5,000 graduate students. More than 2000 faculty members and approximately 9000 staff work in the University's teaching, research and extension programs. Cornell ranks twelfth among United States universities in total research and development activities, and second in funds allocated by the National Science Foundation.

The Cornell University Library (CUL) supports and enhances the university's teaching and research programs. The nineteen libraries that are part of CUL house a rich array of educational and cultural resources, providing a diverse range of reference and information services. The Library holds more than 6 million volumes, 7 million microforms, 76,000 sound recordings, 225,000 maps, 45,000 graphic, film and video materials, 6000 computer files, and 56,000 cubic feet of manuscripts, and subscribes to more than 62,000 journals and other serial publications. Cornell is a member of the Research Libraries Group, OCLC, the Association of Research Libraries, the Center for Research Libraries, and the South Central Research Library Council. The library is a vital and integral component of the educational programs and research projects underway at Cornell.

The Albert R. Mann Library serves the College of Human Ecology, the College of Agriculture and Life Sciences, the Division of Biological Sciences and the Division of Nutrition. This project has been undertaken, in part, to celebrate the centennial year of Cornell's College of Human Ecology, which was originally founded as one of the early colleges of Home Economics. Mann Library is the second largest library in the Cornell University Library system and has taken a leading role in the development of online systems in CUL. Mann Library's pioneering work in developing the Mann Library Gateway to electronic resources led to the creation of the Cornell Library Gateway (<http://www.library.cornell.edu/>).

Members of Mann Library's Collection Development and Preservation Division will manage this project. The Division has been a national leader in the preservation of the agricultural literature, and developed the core literature model of preservation. The Division's staff has experience in both preservation microfilming and digitizing projects. Mann Library's digital library projects are supported by an Information Technology Section comprised of six full-time staff members. The Library's preservation staff work in cooperation with Cornell University Library's central Department of Preservation and Conservation, a pioneer in the use of digital imaging technology for preservation purposes.

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